

Advanced Materials**RenLam®1720/Ren® 956 System****ROOM TEMPERATURE LAMINATING SYSTEM****DESCRIPTION :**

RenLam® 1720/Ren® 956 System is a white, room temperature curing, two-component epoxy laminating system offering excellent cloth wet-out and low shrinkage with good dimensional stability.

APPLICATIONS :

RenLam® 1720/Ren® 956 System is well suited for patterns, drill jigs, assembly fixtures, Keller models, body cubes, draw dies, master die models, spotting racks, etc.

MIXING RATIO :

Reaction Ratio 100R to 15H by weight
 100R to 21H by volume

Mixing : Stir each component thoroughly before use. Weigh each component accurately ($\pm 5\%$) into clean containers. Thoroughly mix resin and hardener together (minimum 3 minutes) scraping container sidewalls, bottom and mixing stick several times to assure a uniform mix.

TYPICAL MIXED PROPERTIES :

Property	ASTM Test Method	Test Value ⁽¹⁾
Gel time (200 grams)	D-2471	40 mins.
Color	Visual	White
		Amber
		White
Viscosity, mixed	D-2393	3,200 cP
Demold time (for most applications)	16 hrs.	
Cure time		24 hrs.

⁽¹⁾ Tested @ 77 °F (25 °C)

TYPICAL CURED PROPERTIES :

Property	ASTM Test Method	Test Value⁽¹⁾
Specific Gravity	D-792	1.34
Cubic inch per pound	D-792	20.5
Hardness (Shore D)	D-2240	90
Ultimate Compressive Strength (psi)	D-695	21,000
Compressive Strength (psi) (0.2 % offset)	D-695	15,300
Ultimate Flexural Strength ⁽²⁾ (psi)	D-790	36,000
Flexural Modulus (psi) (lam.)	D-790	1.6 x 10 ⁶
Ultimate Tensile Strength (psi) (lam.)	D-638	20,000
Deflection Temperature (°F) @ 264 psi	D-648	--
Coefficient of Linear Thermal Expansion (in/in/°F)	D-3386	1.02 x 10 ⁻⁵
Shrinkage ⁽³⁾ in/in	D-2566	0.00019
Wet-out	ERF 16-64	4 sq. Ft./100ml

(1) Cure Schedule – 7 days at 77 °F (25 °C), tested at 77 °F (25 °C)

(2) 8 ply laminate, hand lay-up, plies rotated 45°.

(3) Aircraft shrinkage test, laminate.

Note : These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed in establishing product specifications, please consult with our Quality Control Department.

CURING INSTRUCTIONS :

Although room temperature epoxies will normally set up to a rigid, demoldable state within 24 hours at room temperature (75 °F ± 5 °F), these systems reach their full cure after seven days at room temperature. A full cure can be accelerated by applying heat after the part has set rigid. We recommend a post cure of 150 °F for six hours. (Add to this adequate time to bring the part to the post cure temperature). After cure, the part should be cooled at a slow rate so as not to shock the part thermally.

Uniform heat distribution is also required during post cure ; concentrated heat, such as that directed from a lamp, can cause warp. An elevated temperature cure will slightly increase the shrinkage compared to a room temperature cure.

HANDLING :**RenLam® 1720/Ren® 956 Resin and Hardener**

Work in a well ventilated area and use clean, dry tools for mixing and applying. For two component system, combine the resin and hardener according to mix ratio. Mix together and use immediately after mixing. Material temperature should not be below 65 °F (18 °C) when mixing.

RenLam® 1720/Ren® 956 Resin

Stir well before use. This material will separate.

STORAGE :

RenLam® 1720/Ren® 956 System should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). Under these storage conditions, the shelf life is 2 years. The product should not be exposed to direct sunlight.

PRECAUTIONARY STATEMENT :

Huntsman Advanced Materials Americas LLC maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to MSDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN**FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

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